(19) World Intellectual Property Organization International Bureau





(43) International Publication Date 6 May 2005 (06.05.2005)

PCT

(10) International Publication Number WO 2005/039858 A1

(51) International Patent Classification⁷: 45/33, 45/00, A46B 9/04, 5/00

B29C 45/16,

10, (7

(21) International Application Number:

PCT/EP2004/012062

(22) International Filing Date: 22 October 2004 (22.10.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

0324658.4

22 October 2003 (22.10.2003) GB

(71) Applicant (for all designated States except US): GLAXO-SMITHKLINE CONSUMER HEALTHCARE GMBH & CO KG? [DE/DE]; Bussmatten 1, 77815 Buehl (Baden) (DE).

(72) Inventors; and

(75) Inventors/Applicants (for US only): EBNER, Winfried? [DE/DE]; Zahoransky Formenbau GmbH, Elsaesserstrasse 11, 79110 Freiburg (DE). KRAEMER, Hans? [DE/DE]; GlaxoSmithKline, Bussmatten 1, 77815 Buehl (Baden) (DE). MEYER, Berthold? [DE/DE]; M + C Schiffer GmbH, Industriestrasse 4, 53577 Neustadt (DE). WALGENBACH, Andreas? [DE/DE]; M + C Schiffer GmbH, Industriestrasse 4, 53577 Neustadt (DE).

(74) Agent: WALKER, Ralph, Francis; GlaxoSmithKline, Corporate Intellectual Property (CN925.1), 980 Great West Road, Brentford Middlesex TW8 9GS (GB).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

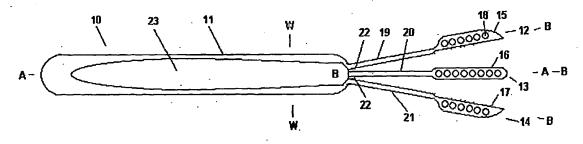
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: PROCESS FOR MAKING TOOTHBRUSHES



(57) Abstract: A process for making a toothbrush head comprising widthways adjacent sections (12, 13, 14), the process comprising the stages of first making the head in an injection moulding process with the sections (12, 13, 14) relatively spaced apart from each other in a widthways direction, then secondly moving the sections (12, 13, 14) of the so formed head relatively spaced closer to each other in a widthways direction (W - W). An apparatus for performing the process is also disclosed.